

San Francisco's Experience with Rapid Testing Algorithms (RTAs)



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SF Background

- Since 2003, over **55,000** tests run

2009

- 17 CTL sites in SFDPH network
- Currently over 12,000 rapid tests annually
- **54%** were oral and **46%** were blood
- Less than 1,000 new HIV positives per year
*250 within CTL network

4 Different RTAs

<u>1st</u>	<u>Additional</u>	<u># of different tests</u>	<u>Time Used</u>
Oral or Blood	Blood, Blood	3	18 months

<u>1st</u>	<u>Additional</u>	<u># of different tests</u>	<u>Time Used</u>
Oral	Blood	1	4 years
Oral	Blood, Blood	2	8 months
Blood	Blood	2	2 months

Addressing False Positives



We



Rapid Tests



False Positive at 1 Test Sites

- White male, 40s
- Active IDU
- False positive
- Never returned

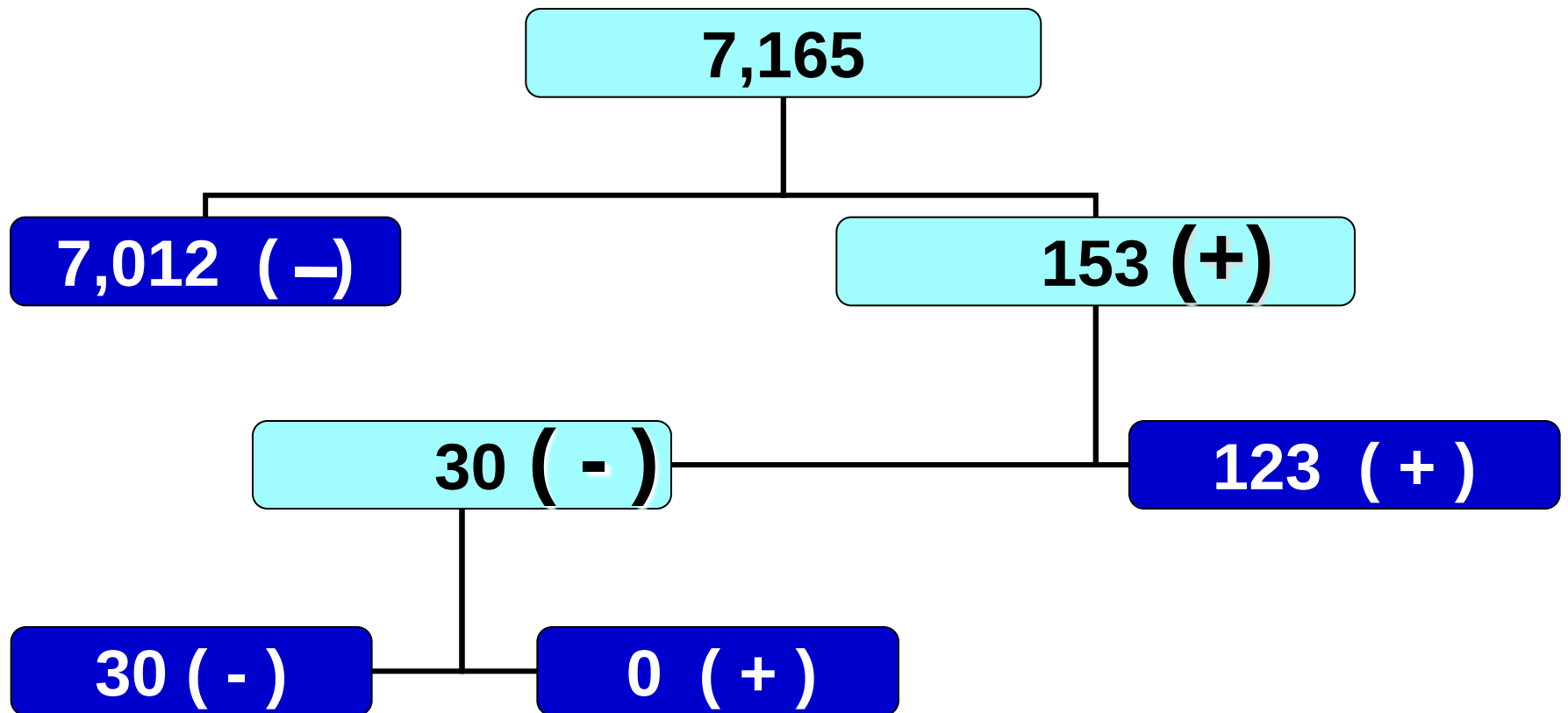
RTA is Needed

RTA Case

- Latino, 30's, Gay
- Partner services and linked to medical care 7 days faster
- A client went home and contacted 67 partners right away

RTA Works!!

OarQuick, Stat-Pak, Uni-Gold



18 Months
100% Lab Match

TIP

2 Tests Best

- Better than 1
Gets rid of most false positives
- Better than 3
Too much QA needed



TIP

Lab is Critical

- Talk to partner **before** starting
- Expertise when you have wonky result
- On going communication keeps partnership alive and well



“Free Labor” Model



TIPS

Start slow, lots of TLC at the start,
active on site TA, “free labor” allows for
direct observation, better QA, data



Storage Temp Issues Solved By?

A – Turning on AC

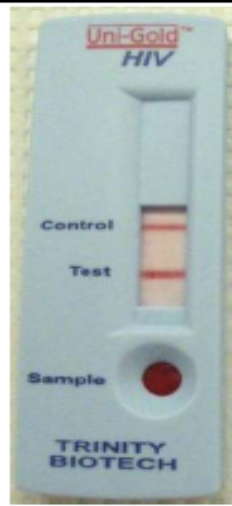


B – Stored test kits on various locations

C – Stored kits in the wine fridge

TIP

Keep It Simple

OraQuick	Stat-Pak	Uni-Gold
 #1	 #2	 #3
Oral fluid directly or fingerstick with a loop	Collect blood from the vacutainer tube using a loop (add 1 loop)	Collect blood from the vacutainer tube using specimen dropper (add only 1 drop)
Buffer in vial	3 drops of Stat-Pak buffer	4 drops of Uni-Gold buffer
Run time 20 – 40 min. Read window 20 min.	Run time 15 – 20 min. Read window 5 min.	Run time 10 – 12 min. Read window 2 min.
<u>Run temps</u> 59°F - 99°F	<u>Run temps</u> 59°F - 99°F	<u>Run temps</u> 59°F - 80°F
<u>Storage temps</u> 35°F - 80°F	<u>Storage temps</u> 46°F - 86°F	<u>Storage temps</u> 35°F - 80°F

TIP

Access Site's Capability

- Rapid test in general and RTA in particular need:
 - A history of running efficiency
 - Samples always labeled
 - Lab records completed
 - No expired test kits, controls, tubs

TIP

Counselors / Techs Need

- Good eyesight
- Good penmanship
- Good organization skills
- OK math skills
- Attention to detail



TIP

Do Prep-Work

- Create relationships
- Tech training
- Counseling training
- Revised protocols
- Site flow changes
- Clear written policies and procedures





Mobile Use

Bondage Street Fair “Tent Testing”

67 samples
7 hours

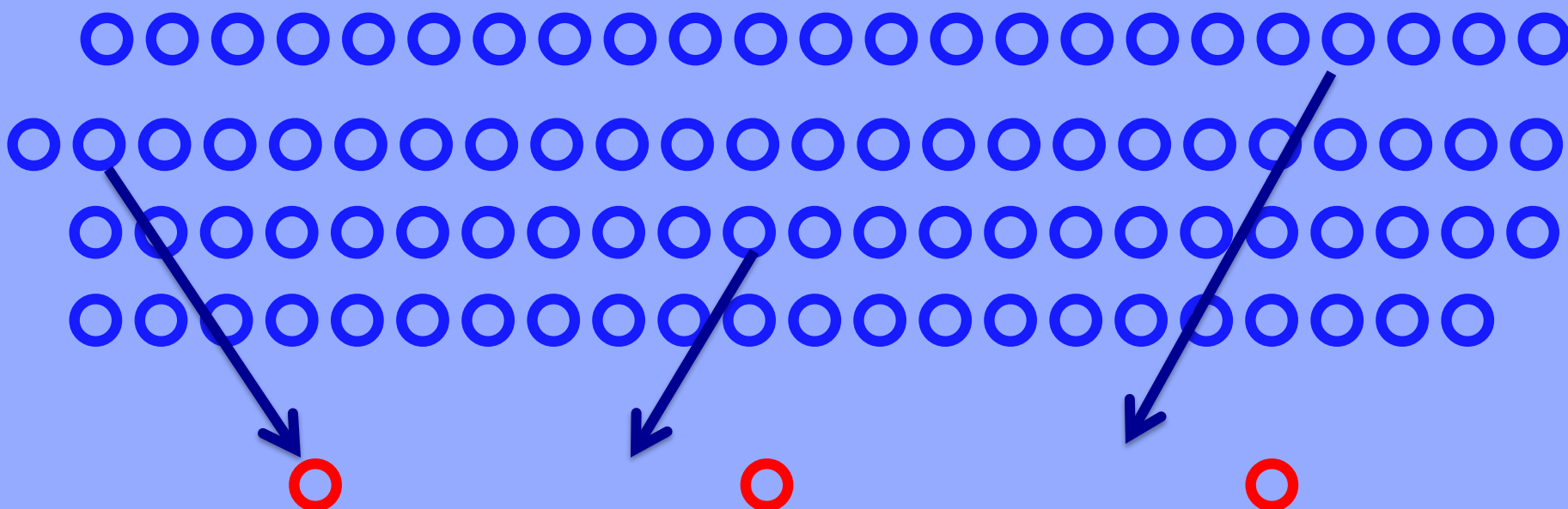
lots of start
and stop
times



TIP

RTA is Good QA

67, oral tests, 3 reactive



Running second test, second sample collection

RTA can be
run outside
traditional
lab settings



DO NOT
TOUCH
RATS OR
RAT TRAPS
Craine Pest Control
retrieves all traps
and animals in
them.

**Most of the “trouble”
was around
confirmation sample
processing**

**Cost
Bio hazards
Difficult sticks
Specimen tubs
Additional staff
Specimen shipping**





What We Want “New Gold Standard”

2 tests, different manufactures
(oral, blood, blood)*

or

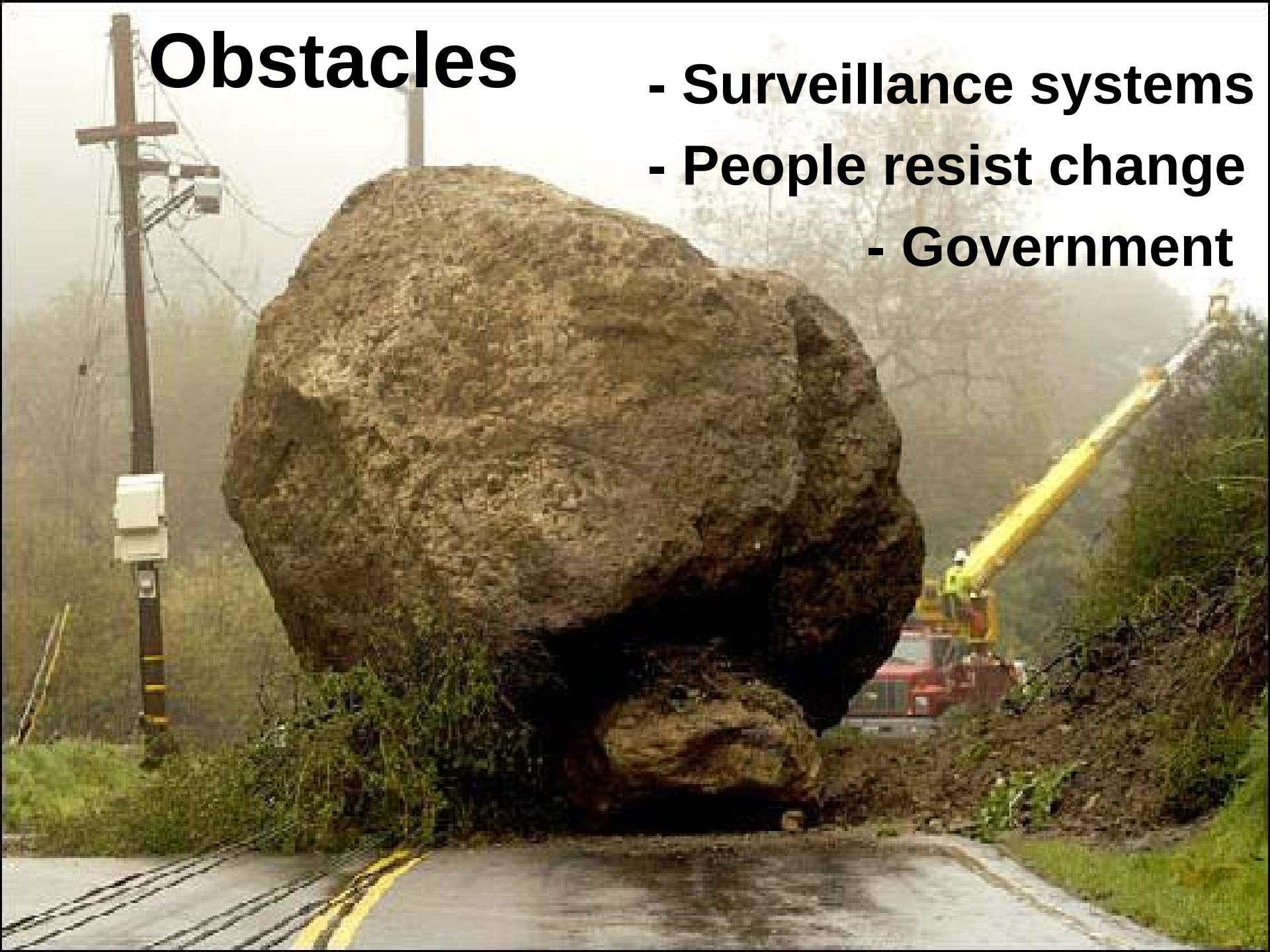
(blood, blood)*

Refer to medical care for confirmation and
further testing

* Discordant results require additional testing

Obstacles

- Surveillance systems
- People resist change
- Government



Benefits

- Accuracy
 - Roughly **1/33,000** get incorrect
- Saving
 - No confirmation testing at site
 - No specimen shipping
 - No blood drawing
- Safer, less bio hazards
- No week wait
- Reduces psychological harm

Non RTA Site, False Positive

- Young white female
- Rape, sexual assault
- False positive
- Harmed

RTA is Needed!!!

Thank You

- SF Community
- AIP Wellness, BAART, FAP, Tenderloin Health, SF AIDS Foundation's Magnet
- Inverness, OraSure, Trinity
- Jacqueline Ryrangirwa and others from LA
- Kevin Delany, Bernie Branson, CDC
- SF DPH Staff

THANK YOU ALL!!

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**Questions
please call...**

